



**UNITED STATES DEPARTMENT OF COMMERCE
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/375,862	08/17/99	CHANG	S 0411.63239

GREER BURNS & CRAIN LTD
SUITE 8660 - SEARS TOWER
233 SOUTH WACKER DRIVE
CHICAGO IL 60606

QM02/0504

EXAMINER

BARTON, R

ART UNIT

PAPER NUMBER

3745

DATE MAILED:
05/04/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/375,862

Applicant(s)
Chang

Examiner
Rhonda Barton

Group Art Unit
3745



☐ Responsive to communication(s) filed on _____.

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-26 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-26 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☒ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☒ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:

On Page 3 Line 11, change "increase" to --increases--.

On Page 6 Line 16, change "rotor" to --guard--.

On Page 6 Line 17, change "guard" to --rotor--.

On Page 8 Lines 13 and 14, change "fans" to --blades--.

Appropriate correction is required.

Claim Objections

2. Claim 9, 15, 17, 22 and 24, are objected to because of the following informalities: In claims 15 and 22, Line 3 of both, insert --to-- after "blades" (second occurrence). In claims 9, 17 and 24, it is unclear to what the word "each" refers. Appropriate correction is required.

Claim Rejections - 35 U.S.C. § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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4. Claims 1, 13 and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. In Claim 1, there is insufficient antecedent basis for the limitation "the rotor blades" in Line 7.

In Claim 13, there is insufficient antecedent basis for the limitation "the rotor blades" in Line 6.

In Claim 20, there is insufficient antecedent basis for the limitation "the rotor blades" in Line 6.

Claim Rejections - 35 U.S.C. § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 2, 4, 5, 8, 9, 12-15, 17, 20, 21 and 24, are rejected under 35 U.S.C. 102(b) as being anticipated by Fujie (Patent Number 3,342,254).

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Fujie discloses a main frame (1), a set of guard blades (3, 4) radially arranged inside the main frame and fixed onto an inner surface of the main frame (Figure 3(g)); and the guard blades (3, 4) have a shape substantially identical to a set of rotor blades (6).

Regarding claim 2, the guard blades are arranged downstream of the rotor blades.

Regarding claim 4, the guard blades are arranged upstream of the rotor blades.

Regarding claim 5, a count of the guard blades is about 1-2 times that of the rotor blades.

Regarding claim 8, there is a motor holder (7).

Regarding claim 9, (Figure 3(g) the motor holder (7) is a hollow cylinder substantially located at the center of the main frame and fixed thereonto each is the other end of the guard blades (3, 4).

Regarding claim 12, the main frame (1) of the fan guard is integrally formed with the frame of the rotor device.

Regarding claim 13, Fujie discloses a main frame (1); and a set of guard blades (3, 4) wherein the guard blades are arranged downstream of a set of rotor blades (6) and have a shape and an arrangement relative to the rotor blades.

Regarding claim 14, the shape of the guard blades is substantially identical to that of the rotor blades (6).

Regarding claim 15, (Figure 3f) the arrangement of the guard blades relative to the rotor blades allows one of the guard blades and one of the rotor blades to constitute a near letter S

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configuration in a cross-sectional view at a moment that a leading point of the rotor blade is moved to follow a camber line of the guard blade (3, 4).

Regarding claim 17, there is a motor holder which is a hollow cylinder substantially located at the center of the main frame (1), and fixed thereonto each is the other end of the guard blades (3, 4).

Regarding claim 20, Fujie discloses a main frame (1); and a set of guard blades (3, 4) wherein the guard blades are arranged upstream of the rotor blades, and have a shape and an arrangement relative to the rotor blades (Figures 2(d), 2(c), 2(e)).

Regarding claim 21, the shape of the guard blades is substantially identical to that of the rotor blades (6).

Regarding claim 24, there is a motor holder which is a hollow cylinder substantially located at the center of the main frame (1), and fixed thereonto each is the other end of the guard blades (3, 4).

8. Claims 1-5, 7, 10, 11, 13-16, 18-21, 23, 25 and 26, are rejected under 35 U.S.C. 102(b) as being anticipated by Anderson et al. (Patent Number 4,968,216).

Anderson (Figure 1) discloses a main frame (36, 82); a set of guard blades (40, 84) radially arranged inside the main frame and fixed onto an inner surface of the main frame; and the guard blades (40, 84) have a shape substantially identical to a set of rotor blades (56, 106).

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Regarding claim 2, the guard blades (84) are arranged downstream of the rotor blades (56).

Regarding claim 3, there is another frame (36) and another set of guard blades (40) arranged upstream of the rotor blades (56).

Regarding claim 4, the guard blades (40) are arranged upstream of the rotor blades (56).

Regarding claim 5, a count of the guard blades is about 1-2 times that of the rotor blades.

Regarding claim 7, the guard blades are made of metal (Column 4 Lines 12-13).

Regarding claim 10, there is at least one reinforcing ring (80) connecting all of the guard blades.

Regarding claim 11, the fan is assembled by having the main frame (36 by means of 34) of the fan guard attached to a frame of the rotor device (54 by means of 62)

Regarding claim 13, Anderson discloses a main frame (92); and a set of guard blades (84) wherein the guard blades are arranged downstream of a set of rotor blades (56) and have a shape and an arrangement relative to the rotor blades.

Regarding claim 14, the shape of the guard blades (84) is substantially identical to that of the rotor blades (56).

Regarding claim 15, the arrangement of the guard blades (84) relative to the rotor blades (56) allows one of the guard blades and one of the rotor blades to constitute a near letter S configuration in a cross-sectional view at a moment that a leading point of the rotor blade is moved to follow a camber line of the guard blade.

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Regarding claim 16, there is another frame (36) and another set of guard blades (40) arranged upstream of the rotor blades (56).

Regarding claim 18, there is at least one reinforcing ring (34) connecting all of the guard blades.

Regarding claim 19, the guard blades are made of metal.

Regarding claim 20, Anderson (Figure 1) discloses a main frame (36); and a set of guard blades (40) wherein the guard blades are arranged upstream of a set of rotor blades (56), and have a shape and an arrangement relative to the rotor blades.

Regarding claim 21, the shape of the guard blades (40) is substantially identical to that of the rotor blades (56).

Regarding claim 23, there is another frame (82) and another set of guard blades (84) arranged downstream of the rotor blades (56).

Regarding claim 25, there is at least one reinforcing ring (34) connecting all of the guard blades.

Regarding claim 26, the guard blades are made of metal (Column 4 Lines 12-13).

9. Claims 13, 16, 18, 20, 23, and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Rao (Patent Number 3,883,264).

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Rao (Figures 2-4) discloses a main frame (30); and a set of guard blades (22) wherein the guard blades are arranged downstream of the rotor blades (11) and have a shape and an arrangement relative to the rotor blades.

Regarding claim 16, (Figure 4) there is another frame (29) and another set of guard blades (19) arranged upstream of the rotor blades (11).

Regarding claim 18, there is at least one reinforcing ring (27) connecting all of the guard blades.

Regarding claim 20, Rao discloses a main frame (29); and a set of guard blades (19) radially arranged inside the main frame and fixed onto an inner surface of the main frame by each one end; the guard blades (19) are arranged upstream of the rotor blades.

Regarding claim 23, there is another frame (30) and another set of guard blades (22) arranged downstream of the rotor blades (11).

Regarding claim 25, there is at least one reinforcing ring (26) connecting all of the guard blades.

Claim Rejections - 35 U.S.C. § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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11. Claims 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fujie (Patent Number 3,342,254) in view of Sturm et al. (Patent Number 4,724,747).

Regarding claim 6 Fujie discloses the invention as discussed in claim 1 above, however fails to show that the guard blades are made of plastic. Sturm teaches that fan guards (6) can be made of plastic (Column 2 Line 68 to Column 3 Line 2) for the purpose of having a lighter weight fan. Therefore, it would have been obvious to one having ordinary skill in the art at the time that the invention was made, to make a plastic fan guard in Fujie, as taught by Sturm, for the purpose of having a lighter weight fan.

Prior Art

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure and consists of two patents.

McMahan (Patent Number 2,154,313) is cited to show directing vanes of a fan.

Hung (Patent Number 5,839,205) is cited to show an electric fan with multiple blades to raise air output pressure.

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Barton whose telephone number is (703) 305-0863. The

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examiner can normally be reached on Monday-Thursday from 8:00 A.M.-5:30 P.M. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look, can be reached on (703) 308-1044. The fax number for this group is (703) 305-3463.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0861.

April 26, 2000



Rhonda Barton



EDWARD K. LOOK
SUPERVISORY PATENT EXAMINER
GROUP 3700

4/27/00

ATTACHMENT TO AND MODIFICATION OF
NOTICE OF ALLOWABILITY (PTO-37)

(November, 2000)

NO EXTENSIONS OF TIME ARE PERMITTED TO FILE CORRECTED OR FORMAL DRAWINGS, OR A SUBSTITUTE OATH OR DECLARATION, notwithstanding any indication to the contrary in the attached Notice of Allowability (PTO-37).

If the following language appears on the attached Notice of Allowability, the portion lined through below is of no force and effect and is to be ignored¹:

A SHORTENED STATUTORY PERIOD FOR RESPONSE to comply with the requirements noted below is set to EXPIRE **THREE MONTHS** FROM THE "DATE MAILED" of this Office action. Failure to comply will result in ABANDONMENT of this application. ~~Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).~~

Similar language appearing in any attachments to the Notice of Allowability, such as in an Examiner's Amendment/Comment or in a Notice of Draftperson's Patent Drawing Review, PTO-948, is also to be ignored.

¹ The language which is crossed out is contrary to amended 37 CFR 1.85(c) and 1.136. See "Changes to Implement the Patent Business Goals", 65 Fed. Reg. 54603, 54629, 54641, 54670, 54674 (September 8, 2000), 1238 Off. Gaz. Pat. Office 77, 99, 110, 135, 139 (September 19, 2000).